

Notice of Allowability

Application No.

10/066,745

Examiner

Duc C. Ho

Applicant(s)

ZABAWSKYJ ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 8-22-06.
2. ☒ The allowed claim(s) is/are 22, 15, 16, 24, 23, 17-19. Renumbered 1-8, respectively.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 10-12-06.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 10-02-06&11-21-06.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Memory 35; Data 36; the state 37; and the state and profile information 38 as described in paragraph 0046 in figures 1-2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

EXAMINER 'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Andrew Currier on 10-02-06.

The application has been amended as follows:

In the specification:

[0046] Referring to FIG. 1, a service creation and execution environment (SCEE) 15 provides an open service creation environment which provides a developer the ability to generate and provision applications using NEOs in conjunction with the service creation and execution application programming interface (SCEAPI) 19. SCEAPI provides access to SCEE which resides in a public network gateway (PNG) by means of referencing NEOs or invoking SCEE compliant applications using directives along with any associated parameters. SCEAPI 19 and SCEE 15 enable the generation and provisioning of services in a manner which is independent of the complexities and nuances of the underlying network infrastructure. In particular, a given NEO may be reused in order to communicate and control a variety of network elements produced by different vendors as variations in the parametric and logical attributes of the network elements are accommodated by mapping a functional or informational element into the control and informational parameters required by the network element. SCEE 15 includes a number of subcomponents in order to provide for a variety of object-oriented application programming interfaces. A common object request broker architecture (CORBA) 17 and extensible markup language (XML) 16 compliant subcomponents have been depicted. Those skilled in the art will recognize that other object oriented application programming interfaces may serve the same purpose without diluting the intent and scope of the present invention. A database 18 is used to store and retrieve information including, but not limited to, applications, network elements, users, interconnected networks, and sessions. SCEE 15 interacts with the network interface layer (NIL) 14 in order to access, communicate, and control the network elements 1 in the public telecommunications network via a suitable communications link and interface protocol 2. Database 18 contains data 36 pertaining to a) the state 37 of circuit-switched calls, data-packet sessions, and applications and b) state and profile information 38 pertaining to subscribers. In a present embodiment, the state and profile information 38 in data 36 of a group of subscribers is associated with a single record.

[0081] At 701, the PNG 27 receives the query and invokes a subscriber profile application resident (not shown) on the PNG 27 in order to ascertain state and profile information 38 pertaining to subscribers. Based on an internal translation or database 18 lookup, the subscriber profile application determines that the service logic for this particular application resides on the PVNG 28. For a group of subscribers, such a database 18 lookup would be associated with a single record. The PNG 27 forwards the query to the PVNG 28 via SCEAPI 19.

[0083] At 703, the PNG 27 receives the response from the PVNG 28 and invokes a subscriber profile application resident (not shown) on the PNG 27 in order to ascertain state and profile information 38 pertaining to subscribers. For a group of subscribers, such a database 18 lookup would be associated with a single record. Based on an internal translation or database lookup, the subscriber profile application determines

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that the response was associated with a previous query and formulates a response which will forward the instructions received from the PVNG 27 to the SSP 104. The content and format of the response may vary pursuant to the telecommunication network provider's requirements including the capabilities supported by the SSP 104. For example, the response message would vary as a function of whether the SSP 104 supports IN or AIN compliant triggers.

[0093.1] Those skilled in the art will appreciate that the service creation environment provided by the PNG 27 and PVNG 28 in conjunction with SCEAPI 19 and SCEE 15 can be utilized for the purpose of applying capabilities and services for a group of subscribers. As an example, a call-attendant service can be associated with a group of subscribers. The call-attendant service can include a call-attendant state, which will invoke functionality whereby calls are first diverted to one or more subscribers in the group and then to the call attendant if none of the subscribers in the group is available. (This can also be expressed as setting the call-attendant state to 'active' for a group of subscribers when one or more subscribers are busy or unavailable for an incoming call). In the PNG 27 or PVNG 28, the state and profile information 38 contains the aforementioned call-attendant state and subscriber state for the group of subscribers. In a present embodiment, the state and profile information 38 for the group of subscribers is associated with a single record within database 18.

In the Claims:

22. [Currently Amended] A system comprised of one or more public network gateways and one or more private network gateways, wherein the public network gateway is a computer platform comprising:

- memory for storing service execution logic;
- a database for storing service logic data and subscriber data;
- service execution logic for one or more telecommunication services;
- a mechanism for loading and executing service logic;

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interfaces for the purpose of communicating with public telecommunication network elements utilizing the native communication protocols supported by the network elements;

interfaces for the purpose of communicating with other public network gateways utilizing a communication channel and protocol;

the database containing data representing:

a) the state of circuit-switched calls, data-packet sessions, and applications, and,

b) the state and profile information respective to subscribers; and

the state and profile information of a group of subscribers is associated with a single record, said single record formatted to permit said interfaces to communicate with said public telecommunication network elements in said native communication protocols.

23. [Currently Amended] A system comprised of one or more public network gateways and one or more private network gateway, wherein the private network gateway is a computer platform comprising:

memory for storing service execution logic; a database for storing service logic data and subscriber data;

service execution logic;

a mechanism for loading and executing service logic;

interfaces for the purpose of communicating with private network elements utilizing the native communication protocols supported by the network elements;

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interfaces for the purpose of communicating with public network gateway utilizing a communication channel and protocol;

the database containing data representing:

a) the state of circuit-switched calls, data-packet sessions, and applications, and,

b) the state and profile information respective to subscribers; and

the state and profile information of a group of subscribers is associated with a single record, said single record formatted to permit said interfaces to communicate with said public telecommunication network elements in said native communication protocols.

Reason for Allowance

3. Regarding claims 15-19, and 22-24, the prior art fails to teach or suggest a system comprised of one or more public network gateways and one or more private network gateway, wherein the private network gateway is a computer platform comprising a database containing data pertaining to a) the state of circuit-switched calls, data-packet sessions, and applications, and, b) the state and profile information pertaining to subscribers; and the state and profile information of a group of subscribers is associated with a single record, the single record formatted to permit the interfaces to communicate with the public telecommunication network elements in the native communication protocols, in combination with other limitations, as specified in the independent claims 22, and 23.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Ho whose telephone number is (571) 272-3147. The examiner can normally be reached on Monday through Friday from 7:00 am to 3:30 pm.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin, can be reached on (571) 272-3134.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner

Duc Ho

11-22-06

